

A List of the Species of Craspedolepta Enderlein Recorded from North America (Homoptera: Psyllidae: Aphalarinae)

Louise M. Russell

Systematic Entomology Laboratory, Agr. Res. Serv.,
U. S. Department of Agriculture, Beltsville, Md. 20705

ABSTRACT

Craspedolepta is recognized as a valid genus. The list of North American taxa assigned to the genus includes 53 specific or varietal names. Of these, 35 names are treated as representing valid taxa and 17 represent misidentifications, synonyms or nomina nuda. Thirty new name combinations are proposed.

In this article I recognize *Craspedolepta* Enderlein as a valid genus distinct from *Aphalara* Foerster, reassign to *Craspedolepta* 2 North American species placed in the genus by Enderlein but excluded from it by American workers, and propose 31 new name combinations for Nearctic species or varieties originally placed in *Aphalara* and here transferred to *Craspedolepta*. I also dispose of 17 names that represent misidentifications, synonyms or nomina nuda, but I do not comment on the validity of presently recognized species or indicate new synonymy. My purpose is to modernize the nomenclature of one group of North American Psyllidae, and thus provide more meaningful names to persons concerned with this group of psyllids.

Enderlein (1921) established the genus *Craspedolepta* and designated *Aphalara artemisiae* Foerster (1848) as its type-species. He also transferred the Nearctic species *angustipennis* Crawford and *veaziei* Patch from *Aphalara* to his new genus. With the exception of these 2, North American species that are congeneric with *artemisiae* have invariably been described in *Aphalara*, and have not been transferred to *Craspedolepta*.

The reason for the disregard of *Craspedolepta* by Americans is not clear. It is unlikely that all American describers

were unaware of the genus even though they did not mention it and continued to place *angustipennis* and *veaziei* in *Aphalara*. It is possible that Americans considered differences between species insufficient for separation into two genera, and choose without stating it, to ignore *Craspedolepta*.

Craspedolepta and *Aphalara* are closely related and though most species are readily assignable to one or the other genus, a few North American species are placed less easily.

Enderlein separated the genera on one unsatisfactory character, stating that the costa was not thickened distad of R_1 in *Craspedolepta*, and that it was thickened distad of R_1 in *Aphalara*. Later workers, including Dobreau and Manolache (1962), Heslop-Harrison (1949), Loginova (1961, 1963), Vondracek (1957) and Wagner (1947), have provided more reliable characters for the separation of the genera and have furnished new and useful information on the hosts, biology and relationships of members of the group.

North American species of *Craspedolepta* can be separated from those of *Aphalara* as follows:

Clypeus subglobose or pyriform, not tapered from base to apex, not approaching or attaining front margin of head; vertex merging smoothly into the slightly convex genae with-

out interruption; head and thorax yellowish, greenish or black *Craspedolepta* Clypeus elongate, tapered from base to apex, approaching or attaining front margin of head; vertex separated from the small, more strongly convex genae by distinct, shallow furrows; head and thorax usually some shade of orange or red, rarely black

The list of species names includes original citations and former name combinations. Nomina nuda, most of which are manuscript names for species described under other names, and synonyms are placed under the accepted names for the species.

Repositories of type specimens are given when known and are indicated as follows: California Academy of Sciences, San Francisco, CAS; Illinois Natural History Survey, Urbana, INHS; Ohio State University, Columbus, OSU; University of California, Davis, UCD; University of Kansas, Lawrence, UK; U.S. National Museum of Natural History, Washington, D. C., USNM.

The letter C. after the species and author name refers to *Craspedolepta*.

alaskensis (Ashmead) C., n. comb.
Aphalara alaskensis Ashmead 1904. Homoptera of Alaska 8 (part 1): 136, illus. Doubleday, Page and Company, New York. (Also Smithsonian Institution Publ. No. 1995.)
Types.—USNM.
angustipennis (Crawford) C.
Aphalara artemisiae Foerster var. *angustipennis* Crawford 1911, Pomona J. Entomol. 3: 480, 494, 499, illus.
Aphalara angustipennis Crawford 1914, U. S. Natl. Mus. Bull. 85: 26, 30, illus.
Craspedolepta angustipennis (Crawford): Enderlein 1921, Zool. Anz. 52: 118.
Aphalara angustipennis Riley in Crawford 1911, Pomona J. Entomol. 3: 480, 499; 1914 U. S. Natl. Mus. Bull. 85: 30. Nomen nudum.
Aphalara utahensis Riley in Crawford, 1911, Pomona J. Entomol. 3: 480, 498; 1914, U. S. Natl. Mus. Bull. 85: 30. Synonym of *angustipennis* in part. Nomen nudum.
Types.—USNM.
angustipennis Riley—see *angustipennis* (Crawford).
anomala (Crawford) C. (*Anomocera*), n. comb.
Aphalara (Anomocera) anomala Crawford 1914, U. S. Natl. Mus. Bull. 85: 27, 37–38.
Aphalara occidentalis anomala Riley in Crawford 1914, U. S. Natl. Mus. Bull. 85: 38. Nomen nudum.
Types.—USNM.

artemisiae (Foerster) C.
Aphalara artemisiae Foerster 1848, Verh. Naturh. Vereins Preussischen Rheinlande 5: 96.
Craspedolepta artemisiae (Foerster): Enderlein 1921, Zool. Anz. 52: 118.
Aphalara utahensis Riley in Crawford 1911, Pomona J. Entomol. 3: 480, 498; 1914, U. S. Natl. Mus. Bull. 85: 30. Synonym of *artemisiae* in part. Nomen nudum.
bifida (Caldwell) C., n. comb.
Aphalara bifida Caldwell 1936, Ohio J. Sci. 36: 222, illus.
Types.—USNM.
caudata (Crawford) C., n. comb.
Aphalara caudata Crawford 1914, U. S. Natl. Mus. Bull. 85: 26, 33.
Aphalara koebeli Riley in Crawford 1914, U. S. Natl. Mus. Bull. 85: 33. Nomen nudum.
Types.—USNM.
communis Crawford C.—see *veaziei* (Patch).
communis metzaria Crawford—see *veaziei metzaria* (Crawford).
constricta (Caldwell) C., n. comb.
Aphalara constricta Caldwell 1936, Ohio J. Sci. 36: 220, illus.
Types.—OSU.
coquillettii Riley—see *pulchella* (Crawford).
cuyama (Tuthill) C., n. comb.
Aphalara cuyama Tuthill 1939, Iowa State College J. Sci. 13: 181.
Types.—UK, Tuthill colln.
delongi (Caldwell) C., n. comb.
Aphalara delongi Caldwell 1936, Ohio J. Sci. 36: 221, illus.
Types.—OSU, USNM.
eas (McAtee) C., n. comb.
Aphalara eas McAtee 1918, Entomol. News 29: 221–222, illus.
Types.—USNM.
easta (Caldwell) C., n. comb.
Aphalara easta Caldwell 1938, Ohio Biol. Surv. Bull. 34 (vol. 6 no. 5): 237, 239–240, illus.
Types.—OSU, USNM.
epilobii Riley—see *nebulosa kincaidi* (Ashmead).
fascipennis (Patch) C., n. comb.
Aphalara fascipennis Patch 1912, Maine Agric. Exp. Stn. Bull. 202: 217–218, illus.
Psylla pallida Harris in Crawford 1914, U. S. Natl. Mus. Bull. 85: 35. Nomen nudum.
Type.—USNM (1 dissected ♂ on slide).
flavida (Caldwell) C., n. comb.
Aphalara flavida Caldwell 1938, Ohio Biol. Surv. Bull. 34 (vol. 6 no. 5): 237, 243–244, illus.
Types.—OSU, USNM.
flavipennis (Foerster), C.
Aphalara flavipennis Foerster 1848, Verh. Naturh. Vereins Preussischen Rheinlande 5: 89.
Craspedolepta flavipennis (Foerster): Wagner 1947, Verh. Vereins für Naturwissenschaftliche Heimatforschung zu Hamburg 29: 62, 65.
Aphalara picta Crawford (not Zetterstedt 1828)

- 1911, Pomona J. Entomol. 3: 481, 495, 501-502, illus.; 1914, U. S. Natl. Mus. Bull. 85: 26, 33-34, illus. Misidentification.
- Aphalara harrissii* Riley in Crawford, 1911, Pomona J. Entomol. 3: 481; 1914, U. S. Natl. Mus. Bull. 85: 34. Nomen nudum.
- Aphalara leucanthemi* Fitch in Crawford 1914, U. S. Natl. Mus. Bull. 85: 34. Nomen nudum.
- fumida* (Caldwell) C., n. comb.
- Aphalara fumida* Caldwell 1938, Ohio Biol. Surv. Bull. 34 (vol 6, no. 5): 237, 243, illus. Types.—OSU.
- furcata* (Caldwell) C., n. comb.
- Aphalara furcata* Caldwell, 1936, Ohio J. Sci. 36: 221-222, illus. Types.—OSU, USNM.
- gutierreziae* (Klyver) C., n. comb.
- Aphalara gutierreziae* Klyver 1931, Pan.-Pac. Entomol. 7: 134-135, illus. Types.—UCD.
- harrissii* Riley—see *flavipennis* (Foerster).
- hebecephala* (Caldwell) C., n. comb.
- Aphalara hebecephala* Caldwell 1936, Ohio J. Sci. 36: 222. Types.—OSU.
- kincaidi* Ashmead—see *nebulosa kincaidi* (Ashmead).
- koebeli* Riley—see *caudata* (Crawford).
- leucanthemi* Fitch—see *flavipennis* (Foerster).
- martini* (Van Duzee) C., n. comb.
- Aphalara martini* Van Duzee 1924, Pan-Pac. Entomol. 1: 22-23. Types.—CAS.
- metzaria* Crawford—see *veaziei metzaria* (Crawford).
- minuta* (Caldwell) C., n. comb.
- Aphalara minuta* Caldwell 1938, Ohio Biol. Surv. Bull. 34 (vol. 6 no. 5): 237, 240-241, illus. Types.—INHS, OSU, USNM.
- minutissima* (Crawford) C. (Anomocera), n. comb.
- Aphalara minutissima* Crawford 1911, Pomona J. Entomol. 3: 494, 500-501, illus.
- Aphalara (Anomocera) minutissima* Crawford 1914, U. S. Natl. Mus. Bull. 85: 27, 37, illus.
- Aphalara occidentalis* Riley in Crawford 1911, Pomona J. Entomol. 3: 501, 1914, U. S. Natl. Mus. Bull. 85: 37. Nomen nudum. Types.—USNM.
- minutistylus* (Klyver) C., n. comb.
- Aphalara minutistylus* Klyver 1931, Pan-Pac. Entomol. 7: 135-137, illus.
- nebulosa americana* Crawford—see *nebulosa kincaidi* (Ashmead).
- nebulosa* (Zetterstedt) var. *kincaidi* (Ashmead) C., n. comb.
- Aphalara* n. sp. Schwarz 1900, Proc. Wash. Acad. Sci. 2: 540.
- Aphalara kincaidi* Ashmead 1904, Homoptera of Alaska 8 (part 1): 136, illus. Doubleday, Page and Company, New York. (Also Smithsonian Institution Publ. 1995.)
- Aphalara nebulosa* var. *kincaidi* Ashmead: Crawford 1914, U. S. Natl. Mus. Bull. 85: 26, 36, illus.
- Aphalara nebulosa* var. *americana* Crawford 1911, Pomona J. Entomol. 3: 494, 503, illus.; 1914, U. S. Natl. Mus. Bull. 85: 36. Synonym.
- Aphalara epilobii* Riley in Crawford 1911, Pomona J. Entomol. 3: 481, 503; 1914, U. S. Natl. Mus. Bull. 85: 36. Nomen nudum. Types.—USNM.
- numerica* (Caldwell) C., n. comb.
- Aphalara numerica* Caldwell 1941, Ohio J. Sci. 41: 420-426. Types.—USNM.
- nupera* (Van Duzee) C., n. comb.
- Aphalara nupera* Van Duzee 1923, Proc. Calif. Acad. Sci. 12 (4th ser.): 200. Types.—CAS.
- occidentalis* Riley—see *minutissima* (Crawford).
- occidentalis anomala*—see *anomala* (Crawford).
- osborni* (Caldwell) C., n. comb.
- Aphalara osborni* Caldwell 1936, Ohio J. Sci. 36: 220-221, illus. Types.—OSU.
- pallida* Harris—see *fascipennis* (Patch).
- picta* Crawford—see *flavipennis* (Foerster).
- picicola* (Crawford) C., n. comb.
- Aphalara picicola* Crawford 1914, U. S. Natl. Mus. Bull. 85: 26, 31. Types.—USNM.
- pulchella* (Crawford) C., n. comb.
- Aphalara pulchella* Crawford 1911, Pomona J. Entomol. 3: 494, 500, illus.; 1914, U. S. Natl. Mus. Bull. 85: 26, 33, illus.
- Aphalara coquilletti* Riley in Crawford 1914, U. S. Natl. Mus. Bull. 85: 33. Nomen nudum. Types.—USNM.
- schwarzi* (Ashmead) C., n. comb.
- Aphalara* n. sp. Schwarz 1900, Proc. Wash. Acad. Sci. 2: 539.
- Aphalara schwarzi* Ashmead 1904, Homoptera of Alaska 8 (part 1): 135, illus. Doubleday, Page and Company, New York. (Also Smithsonian Institution Publ. 1995.) Types.—USNM.
- sinuata* (Caldwell) C., n. comb.
- Aphalara sinuata* Caldwell 1936, Ohio J. Sci. 36: 222-223, illus. Types.—OSU.
- suedae* Riley—see *suaedae* (Crawford).
- suaedae* (Crawford) C., n. comb.
- Aphalara suaedae* Crawford 1914, U. S. Natl. Mus. Bull. 85: 26, 31, illus.
- Aphalara suaedae* Riley in Crawford 1914, U. S. Natl. Mus. Bull. 85: 31. Nomen nudum. Types.—USNM.
- utahensis* Riley—see *angustipennis* (Crawford) and *artemisiae* (Foerster).
- vancouverensis* (Klyver) C., n. comb.
- Aphalara vancouverensis* Klyver 1931, Pan-Pac. Entomol. 8: 11-12, illus.
- veaziei* (Patch) C.
- Aphalara veaziei* Patch 1911, Maine Agric. Exp. Stn. Bull. 187: 16-18, illus.

References Cited

- Aphalara communis* Crawford 1911, Pomona J. Entomol. 3: 494, 499, illus.; 1914, U. S. Natl. Mus. Bull. 85: 31-32. Synonym.
- Craspedolepta veaziei* (Patch): Enderlein 1921, Zool. Anz. 52: 118.
Types.—USNM (on slides).
- veaziei* (Patch) var. *metzaria* (Crawford) C., n. comb.
- Aphalara communis* var. *metzaria* Crawford 1911, Pomona J. Entomol. 3: 494, 499-500; 1914, U. S. Natl. Mus. Bull. 85: 32. Synonym.
- Aphalara veaziei* var. *metzaria* Crawford 1914, U. S. Natl. Mus. Bull. 85: 26, 32.
Types (topotypes).—USNM.
- viridis* (Crawford) C., n. comb.
- Aphalara viridis* Crawford 1914, U. S. Natl. Mus. Bull. 85: 26, 30-31.
Types.—USNM.
- Aphalara mera* Van Duzee does not belong in *Aphalara* or *Craspedolepta*. The name was synonymized with *Heteropsylla texana* Crawford (1914) by Jensen (1945). *A. mera* has been recorded as follows:
- Aphalara mera* Van Duzee 1923, Proc. Calif. Acad. Sci. 12 (4th ser.): 199.
- Paurocephala mera* (Van Duzee): Caldwell 1941, Ohio J. Sci. 41: 420.
Types.—CAS.
- Aphalara punctellus* Van Duzee does not belong in *Aphalara* or *Craspedolepta*. The name was synonymized with *Aphalaroida inermis* Crawford (1914) by Jensen (1949). *A. punctellus* has been recorded as follows:
- Aphalara punctellus* Van Duzee 1923, Proc. Calif. Acad. Sci. 12 (4th ser.): 199.
- Aphalara (Anomocera) punctellus* Van Duzee; Caldwell 1941, Ohio J. Sci. 41: 420.
Types.—CAS.
- Crawford, D. L. 1914. A monograph of the jumping plant-lice or Psyllidae of the New World. U. S. Natl. Mus. Bull. 85: I-IX + 186, illus.
- Dobreaanu, E., and C. Manolache. 1962. Homoptera, Psylloidea in Fauna Republicii Populare Romine. Insecta 8 (fasc. 3): 376 p., illus.
- Enderlein, G. 1921. Psyllidologica VI. Zool. Anz. 52: 115-122.
- Foerster, A. 1848. 3. Uebersicht der gattungen und arten in der familie der Psylloden. Verh. Naturh. Vereins Preussischen Rheinlande 5: 65-98.
- Heslop-Harrison, G. 1949. The Aphalaran genera, *Aphalara* Förster, *Craspedolepta* Enderlein and *Metaphalara* Crawford, with special reference to the European species of *Aphalara*: Hemiptera-Homoptera, family Psyllidae. Ann. Mag. Nat. Hist 2 (ser. 12): 782-801, illus.
- Jensen, D. C. 1945. Notes on the synonymy, nymphs and distribution of *Heteropsylla texana* Crawford (Homoptera, Psyllidae). Pan-Pac. Entomol. 21: 74-76.
- . 1949. The identity of *Hemitrioza washingtonia* Klyver and *Aphalara punctellus* Van Duzee (Homoptera: Psyllidae). Pan-Pac. Entomol. 25: 145-146, illus.
- Loginova, M. M. 1961. A revision of the species of the genera *Aphalara* Frst. and *Craspedolepta* Enderl. (Homoptera, Psylloidea) in the fauna of the USSR. 1. Entomol. Obzr. 40: 602-623, illus. (Translation Entomol. Rev. 3: 328-341, illus.).
- . 1963. Revision of the species of the genera *Aphalara* Frst. and *Craspedolepta* Enderl. (Homoptera, Psylloidea) in the fauna of the USSR. 2. Entomol. Obzr. 42: 621-648, illus. (Translation Entomol. Rev. 42: 334-346, illus.).
- Vondráček, K. 1957. Mery-Psylloidea in Fauna CSR (Praha) 9: 431 p., illus.
- Wagner, W. 1947. Beitrag zur systematik der Deutschen Aphalarinae. (Homopt. Psyll.) Verh. Vereins für Naturwissenschaftliche Heimatforschung zu Hamburg 29: 55-71, illus.